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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,744	12/12/2003	Stephen E. Novak	14135US02	9534
23446	7590	09/23/2004	EXAMINER	
MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			GREEN, ANTHONY J	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

S. C.

Office Action Summary	Application No. 10/734,744	Applicant(s) NOVAK, STEPHEN E.	
	Examiner Anthony J. Green	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 is/are allowed.
- 6) ☒ Claim(s) 1,8-11,16-19 and 21-25 is/are rejected.
- 7) ☒ Claim(s) 2,6,7,12-15,20 and 26-29 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8-10, 16-17, and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Canadian Patent Specification No. 2051615A.

The reference teaches, on page 3, the creation of a deicer composition comprising a mix of calcium nitrite and calcium nitrate and calcium chloride or its mixture with sodium chloride.

The instant claims are met by the reference as the reference teaches a composition and method that encompasses that which is instantly claimed.

3. Claims 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Derwent Abstract No. 1986-012189 (abstract of Soviet Union Patent Specification No. 760697) and Derwent Abstract No. 1973-08789U (abstract of Soviet Union Patent Specification No. 302944) each reference considered individually.

Each of the reference teaches the use of compositions comprising calcium nitrate as deicers on roadways etc.

The instant claims are met by the references as the references teach the use of compositions that encompass that which is instantly claimed.

4. Claims 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Derwent Abstract No. 2000-315875 (abstract of Russian Patent Specification No. 2130958) and Derwent Abstract No. 2001-501278 (abstract of Russian Patent Specification No. 2167179) each reference considered individually.

Each of the references teaches the use of compositions comprising calcium nitrate as deicers on roadways etc.

The instant claims are met by the references as the references teach the use of compositions that encompass that which is instantly claimed.

5. Claims 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatch (US Patent No. 2,980,620).

The reference teaches, in the examples and the claims, the use of various nitrates, such as calcium nitrate or sodium nitrate as deicing agents for melting snow and ice on surfaces (see especially examples 2, 5-6m 14 and 17-19 wherein the specific use of sodium nitrate is mentioned).

The instant claims are met by the reference as the reference teaches the use of compositions that encompass that which is instantly claimed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canadian Patent Specification No. 2051615.

The reference was discussed previously above.

The instant claims are obvious over the reference. While the reference does not teach the same amounts as instantly claimed it does teach amounts that encompass those found in the instant claims. One of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

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Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Accordingly the instant claims are rendered obvious by the reference.

9. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent Abstract No. 1985-305771 (abstract of Japanese Patent Specification No. 60-195178).

The reference teaches the use of compositions comprising at least one melting point lowering agent such as sodium nitrate etc in combination with other components for melting ice and snow on the ground.

The instant claims are obvious over the reference. While the reference does not specifically teach the use of sodium nitrate, it does teach that it may be utilized and accordingly one of ordinary skill in the art would have found it obvious to utilize sodium nitrate without producing any unexpected results since it is at least suggested by the reference. Accordingly the instant claims are rendered obvious by the reference.

10. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garber (US Patent No. 4,803,007).

The reference teaches, in claims 5 and 9, a deicing composition comprising a mixture of sodium chloride and a source of water soluble Mg^{2+} and polyphosphate salt wherein the source of water soluble Mg^{2+} is provided by the salt of a halide, nitrate etc. Column 2, lines 1-10 teach that the composition is used on roadways, vehicles etc.

The instant claims are obvious over the reference. While the reference does not specifically recite an example wherein magnesium nitrate is utilized, it does suggest that it may be utilized in combination with sodium chloride as a deicer composition and accordingly one of ordinary skill in the art would have found it obvious to utilize magnesium nitrate without producing any unexpected results since it is at least suggested by the reference. Accordingly the instant claims are rendered obvious by the reference.

11. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vickers, JR et al (US Patent Publication No. 2003/0146409).

The reference teaches, in claims 15 and 17, a deicing composition prepared by mixing at least two salts of alkali and/or alkaline earth metals and one or more corrosion inhibitors. Claim 17 recites that sodium nitrate is useable as one of the salts.

The instant claims are obvious over the reference. While the reference does not specifically recite an example wherein sodium nitrate is utilized, it does suggest that it may be utilized in combination with another salt as a deicer composition and accordingly one of ordinary skill in the art would have found it obvious to utilize sodium nitrate without producing any unexpected results since it is at least suggested by the reference. As for its use on various surfaces, this is found in paragraph [0002] of the reference. Accordingly the instant claims are rendered obvious by the reference.

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Allowable Subject Matter

12. Claim 20 is allowable over the art of record, as the record fails to teach and/or fairly suggest the application of magnesium nitrate to the surface of coal.

13. Claims 2-7, 12-15, 20, and 26-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

References Cited By The Examiner

14. The remaining references are cited as showing the general state of the art and as such, they are not seen to teach or fairly suggest the instant invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Green whose telephone number is 571-272-1367. The examiner can normally be reached on Monday-Thursday 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Anthony J. Green
Primary Examiner
Art Unit 1755

ajg